THE BOTANICAL REVIEW

CONTENTS VOLUME XXXVII, 1971

Nematodes and Other Pathogens in Auxin-Related Plant-Growth Disorders ..... D. R. Viglierchio 1

Physiology of Sex in Mucorales ..... H. van den Ende and D. Stegwee 22

Aspects of the Cold-Hardiness Mechanism in Plants ..... John Alden and R. K. Hermann 37

The Shoot Apex in Seed Plants ..... Ernest M. Gifford, Jr. and George E. Corson, Jr. 143

The Common Septoria Diseases of Wheat ..... W. A. Shipton, W. R. J. Boyd, A. A. Rosielle, and B. I. Shearer 231

A Metabolic Pathway for Chlorophyll *a* in *Chlorella* ..... S. Aronoff, R. K. Ellsworth, and J. Wickliff 263

Gametophytes of Homosporous Ferns ..... B. K. Nayar and S. Kaur 295

Post-Irradiation Modulation of Ionizing Radiation Damage to Plants ..... Richard M. Klein and Deana T. Klein 397

Biological Assays for Gibberellins ..... K. W. Bailiss and T. A. Hill 437

Fine Structure of the Pyrrophyta ..... John D. Dodge 481

Experimental and Developmental Studies of the Fern Sporophyte ..... Richard A. White 509